



Graywater

An Irrigation Alternative

What is graywater?

Graywater is untreated household wastewater which has not come into contact with toilet waste. It is used water from showers and baths, bathroom sinks and washing machines. It can be directly reused for irrigation without undergoing a treatment process. **It does not include water from toilets, kitchen sinks, dishwashers or laundry water from soiled diapers due to potential health issues.** Graywater can be used to irrigate all plants at your home, except for vegetable gardens.

What are the benefits of utilizing graywater?

Graywater is a form of recycling and therefore reduces potable water consumption. Up to half of your indoor water can be reused as graywater, providing a constant source of recycled water for irrigation.

How is graywater used?

A system must be installed at the home to collect and redirect the graywater to landscaping areas. A graywater system usually consists of a plumbing system and a irrigation system. The most common type of usage system is a drip irrigation system; another design is the mini leach field.

Are there any permits required for operating a graywater system at my house?

California regulators have opened the floodgates for using “gray water” by issuing an emergency decision that allows residents to create simple water-reuse systems without a construction permit.

New state rules provide permit exemptions for some residential gray-water systems, but people still have to follow several requirements. They include:

- The system must allow users to direct water to an irrigation field or the sewer.
- Ponding and graywater runoff are prohibited.
- Graywater can be released above ground, but the discharge point must be covered by at least 2 inches of mulch, rock or other material that minimizes human contact.
- Water used to wash diapers or other soiled garments must be sent to the sewer.
- Gray water shouldn't be used on root vegetables.

A standard home generates about 160 gallons of gray water per day, or nearly 60,000 gallons per year, state officials said. A family of four could reuse 22,000 gallons a year by tapping the rinse water from its washing machine.

What are the steps to implementing a graywater system in my home?

1. Investigate for any local permit process
2. Prepare a plan
3. Select a commercial graywater system or design your own system
4. Submit the plan for review and approval
5. Install the system
6. Arrange for system inspection and approval
7. Use, monitor and maintain the system

For more complete information about graywater systems, go to the County of San Diego Department of Environmental Health website at:

http://www.sdcounty.ca.gov/deh/water/lu_graywater_systems.html or call (760) 940-2861.

Other Helpful Links:

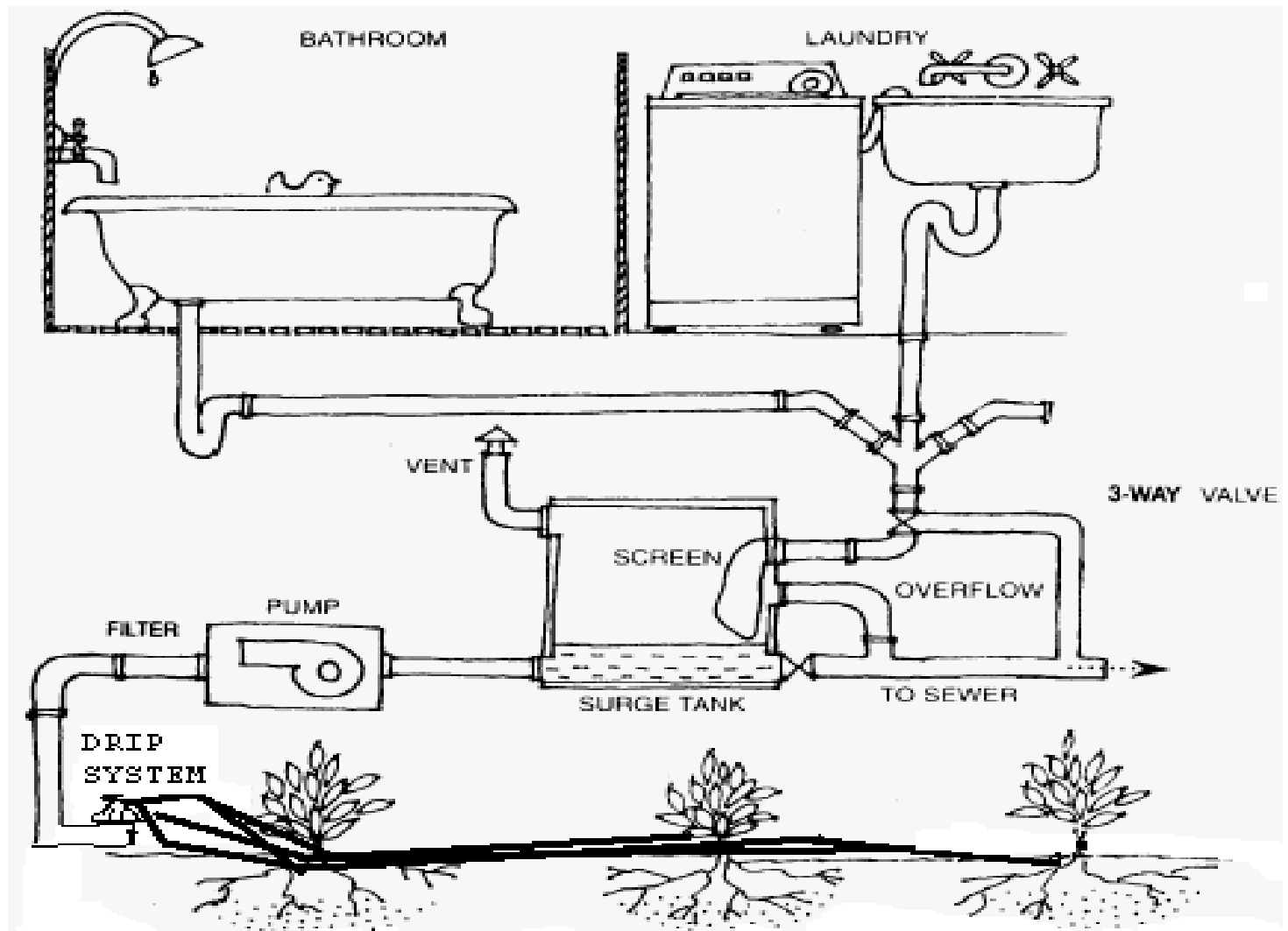
http://www.sdcounty.ca.gov/deh/water/docs/lu_graywater_faqs_revised.pdf

http://hcd.ca.gov/codes/shl/graywater_emergency.html

Example of a Graywater System

Although the concept is simple, there are some easy mistakes that can make installing a gray water system frustrating. For example, rule one -- do not store the gray water for more than a day or the water will produce an odor. Certain plants like gray water more than others and laundry detergents with borax and high levels of sodium are harmful to plants.

SIMPLE CONCEPTIONAL PLANS OF A BASIC GRAYWATER SYSTEM



Homeowners still must follow state guidelines for installation and use. The rules require minimal contact between people and the gray water, for instance by covering the water-release point with at least 2 inches of rock, mulch or other material.

For water conserving ideas and help for your yards design, go to the website below

SUNSET EASY WATER-WISE GARDENING, PDF

<http://www.sandiego.gov/water/edf/waterwisegardening.pdf>